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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/259,000 02/26/99 RUTLEDGE

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EXAMINER

WM02/0116

BAKER & BOTTS
2001 ROSS AVENUE
DALLAS TX 75201

PHILIPPE, G

ART UNIT

PAPER NUMBER

2613

DATE MAILED:

01/16/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/259,000

Applicant(s)

RUTLEDGE, GARY L.

Examiner

Gims S Philippe

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☐ Responsive to communication(s) filed on 30 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-9, 18, 19 and 23-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 18, 19 and 23-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 14) ☐ Notice of References Cited (PTO-892)
- 15) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 16) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 17) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 18) ☐ Notice of Informal Patent Application (PTO-152)
- 19) ☐ Other: _____

Art Unit: 2613

Continued Prosecution Application

1. The request filed on October 30, 2000 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/259,000 is acceptable and a CPA has been established. An action on the CPA follows.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 9, 18-19, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Federau (US Patent no. 4,532,544).

Regarding claim 1, Federau teaches the same invention as previously set forth in the last office action mailed on June 5, 2000, paper no. 5.

It is noted that although Federau teaches a plurality of sensor elements, it is silent about the same details as claimed in newly amended claim 1, namely, a first image sensor having a plurality of sensor elements and a second image sensor having a plurality elements.

Art Unit: 2613

However, in col. 4, lines 2-17 Federau discloses line sensor 23 made of multiple sensor elements 27 with sensor areas 25, wherein each sensor defines a scanning line 31 with respect to panoramic axis 1.

Therefore, it is considered obvious to one skilled in the art at the time of the invention to recognize the advantage of incorporating a first image sensor having a plurality of sensor elements and a second image sensor having a plurality of elements in the video inspection system for the purpose of providing as many sensors as possible to scan the interior of the water well or bore hole element by element, and the skilled artisan would be motivated to look to Federau's suggested scan lines of the sensor element 27 to provide the claimed first and second image sensors with the plurality of sensors in order to create panoramic images with large field showing every details on the monitor for examination (See Federau col. 5, lines 1-8).

As per claim 2, Federau 's area sensor not rotated or moved with respect to the optical system is equivalent to the claimed second image sensor operably acquiring a 360 degrees image without being rotated (See Federau col. 2, lines 51-57).

As per claims 3-4, 23-25 the limitations of these claims have been noted in the above rejection of claim 1. In addition, Federau further discloses the same pressure sealed camera mounted for use in a bore hole or water wall (See Federau col. 2, lines 2-5).

Art Unit: 2613

As per claims 9 and 18 Federau further discloses the same video inspection system wherein the first image sensor, the second image sensor, and the camera board and processor are mounted in a camera assembly (housing) operable to rotate about the first axis when the second image sensor is acquiring an image (See Federau col. 4, lines 46-50), and a camera board processor to process the image for display (See Federau fig. 1, processing circuit 17).

As per claim 19, the limitations of these claims have been noted in the above rejection of claim 1. In addition, Federau further discloses the rotation of the rotatable housing (See Federau col. 3, lines 1-5, and col. 4, lines 61-65), and the individual sensors 27 do acquire image in any position in between to provide a hemispherical image resulting from the sensors rotating around the optical image (See Federau col. 4, lines 8-13).

4. Claims 5-8, and 26-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Federau in view of Barbour (US Patent no. 5,652,617), and further in view of Berman et al. (US Patent no. 5,528,453).

It is noted that Federau is silent about the same system for video inspection comprising a spool for storing a coaxial cable as specified in claims 5-6, 26-27, 29 and 31.

Art Unit: 2613

Barbour discloses the same system for video inspection comprising a spool for storing the coaxial cable (See Barbour fig. 1, spool 4, D connectors, col. 8, lines 23-26, and col. 12, lines 18-20) wherein the D connectors can allow quick disconnect.

Therefore, it is considered obvious that one skilled in the art at the time of the invention having Federau and Barbour before him/her, would be motivated to include Barbour's spool in Federau's system for video inspection for the same purpose of raising and lowering the video tool which eliminates the need of an extra worker winding and unwinding the cable.

It is also noted that although both Federau and Barbour disclose a monitor to display the image captured by the camera (See Barbour fig. 1, display 12), they fail to particularly teach a carrying case having a removable cover as specified in claims 7 and 30.

Berman et al. discloses the same system for video inspection comprising a carrying case having a removable cover (See Berman et al. fig. 9, and col. 7, lines 36-45).

Therefore, it is considered obvious that one skilled in the art at the time of the invention having Federau, Barbour, and Berman et al. before him/her, would have had no difficulty to modify the system for video inspection of Federau and Barbour by incorporating a carrying case having a removable cover for the same purpose of facilitating easy and quick storage into closets or loading into the trunk of a car for transportation as taught by Berman et al. (See Berman et al. col. 7, lines 37-39).

As per claims 8, 28, and 32 the limitations of these claims have been noted in the above rejection of claims 5 and 29. In addition, Federau further discloses the same cable arm

Art Unit: 2613

encoder operable to determine the distance traveled by the camera (See Federau fig. 1, encoder 45, and col. 4, lines 58-68).

As per claim 33, the limitations of this claim have been noted in the above rejection of claim 32. In addition, Federau's rotational drive generates the claimed high torque (See Federau rotational drive 44 of fig. 1, and col. 3, lines 4-5).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gims S Philippe whose telephone number is (703) 305-1107. The examiner can normally be reached on M-F (9:30-7:00) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris S Kelley can be reached on (703) 305-4856. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-9052 for regular communications and (703) 308-9052 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Gims S Philippe
Examiner
Art Unit 2613



GSP

January 10, 2001



CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600